

3.14 RANGE RESOURCES

3.14.1 Affected Environment

The laws that guide the BLM concerning livestock management on BLM administered lands in Nevada include the Taylor Grazing Act of 1934²⁰ and FLPMA.²¹ Along with these laws, further guidance is provided for in 43 CFR Part 4100; more specifically subpart 4180 “Fundamentals of Rangeland Health and Standards and Guidelines for Grazing Administration.” The Standards and Guidelines for the assessment area were approved by the Secretary of the Interior on February 12, 1999.

Nevada is split into five grazing districts and three Resource Advisory Council (RAC) areas. The boundaries of these RACs are understood to be the areas used for ecosystem data collection and analysis of rangeland health. The three RAC are the Mojave-Southern Great Basin RAC, the Sierra Front-Northwestern Great Basin RAC, and the Northeastern Great Basin RAC. The assessment area falls under the Sierra Front-Northwestern Great Basin RAC (with the exception of Jakes Creek Allotment which falls under the jurisdiction of the Elko Field Office) and the Northeastern Great Basin RAC. BLM guidelines allows for adjustments to be considered for grazing areas that overlap boundaries of the RACs.

The Sierra Front/Northwestern RAC Standards and Guidelines were written to accomplish the four fundamentals of rangeland health. Those fundamentals are: watersheds are properly functioning; ecological processes are in order; water quality complies with state standards; and habitats of protected species are in order. The five standards for rangeland health as outlined in the Sierra Front-Northwestern Great Basin Area focus on the following: soils, riparian/wetlands, water quality, plant and animal habitat, and special status species habitat.

There are many grazing allotments within the assessment area. The grazing allotments are made up of public, private, and state lands. The public grazing lands in the assessment areas are administer by two BLM Districts; the Winnemucca Grazing District (established in October 18, 1935 and covers the majority of the assessment area) and the Carson City Grazing District (established on November 3, 1936 and covers two areas in the southeast of the assessment area: Boyer Creek and Copper Kettle Allotments). The Elko Grazing District was the first established on April 8, 1935 and administers one of the grazing allotments in the assessment area: Jakes Creek Allotment. Table 3.14-1 below sets out the grazing allotments by which the KGRAs, PVAs and hydrologic basins range areas intersect, the designated range number, and number of acres and Animal Unit Months (AUMs)²² per allotment. A full AUM fee is charged for each month of grazing by adult animals if the grazing animal (1) is weaned, (2) is 6 months old or older when entering public land, or (3) would become 12 months old during the period of use.²³

²⁰ Taylor Grazing Act of 1934 (43 USC §315; 4100 Series, as amended)

²¹ Federal Land Policy Management Act (FLPMA) of 1976 (P.L. 94-579 (43 USC §1701; 36 CFR §2310.1-2; 1600 Series)

²² An AUM is the amount of forage needed to sustain one cow, five sheep, or five goats for a month.

²³ Standards for Rangeland Health and Guidelines for Livestock Grazing Management, BLM, June 1999.

**TABLE 3.14-1
AFFECTED GRAZING ALLOTMENTS**

KGRA PVA	Hydrolo gic Basin	Range Number and Area	Range Allotment Name	Number of Acres	AUM
1	2	46 P	Pueblo Mountain Allotment	26,311	2,137
1	2	51 P	Alder Creek Allotment	17,819	5,913
1	2	65 P	Knott Creek Allotment	74,262	5,813
2	2	47 P	Wilder-Quinn Allotment	200,000	14,379
2	2	52 P	Dyke Hot Allotment	23,285	1,636
2	2	54 P	Pine Forest Allotment	124,910	9,215
2	2	55 P	Deer Creek Allotment	30,393	754
3	2	57 P	Paiute Meadows Allotment	177,096	3,550
4	2	58 P	Jackson Mountains Allotment	485,207	8,857
5	2	2 P	Cordero Allotment	5,956	197
5	2	3 P	Fort McDermitt Allotment	12,363	2,204
5	2	5 P	U.C. Allotment	44,312	12,902
5	2	10001 P	Washburn Allotment	31,529	1,464
5	2	205 P	McDermitt Creek Allotment	3,762	173
6	4	31 P	Buttermilk Allotment	28,490	3,525
6	4	68 P	Martin Creek Allotment	6,275	257
6	4	34 P	Spring Creek Allotment	22,590	2,488
6	4	32 P	Hot Springs Creek Allotment	53,135	1,770
7 & 11	4 & 2	116 S	Pumpernickel Allotment	124,934	9,417
7	4 & 2	101 S	Rock Creek Allotment	23,365	2,192
7	4 & 2	103 S	Melody Allotment	3,762	1,020
7	4 & 2	39 P	Iron Point Allotment	20,294	1,381
7	4 & 2	144 P	Diamond	18,625	1,203
7	4 & 2	143 S	White Horse Allotment	20,739	1,970
7 & 9	4 & 2	138 P	Humboldt Valley Allotment	103,616	2,900
7	4 & 2	61 P	Blue Mountain Allotment	59,827	2,315
7	4 & 2	60 P	Sand Dunes Allotment	86,636	3,865
7	4 & 2	42 P	Sand Pass Allotment	31,561	887
7	4 & 2	41 P	Golconda Butte Allotment	18,754	3,146
7	4 & 2	38 P	Osgood Allotment	50,080	4,971

KGRA PVA	Hydrolo gic Basin	Range Number and Area	Range Allotment Name	Number of Acres	AUM
7	4 & 2	37 P	Eden Valley Allotment	28,222	4,684
7	4 & 2	1016 P	Jakes Creek Allotment (Elko)	31,452	1,610
7	4 & 2	1009 P	Eleven Mile Flat	23,134	1,542
7	4 & 2	1034 P	White House	1,969	156
7	4 & 2	1032 P	Twenty Five	20,270	34,386
7	4 & 2	2145 S	North Buffalo Allotment	51,573	3,402
8	8,6,4,5	113 S	Humboldt Sink Allotment	68,985	1,582
8 & 9	8,6,4,5	131 S	Ragged Top Allotment	86,314	0
8	8,6,4,5	127 S	Buffalo Hills Allotment	271,018	4,114
8	8,6,4,5	135 S	Blue Wing-Seven Troughs Allotment	772,006	4,775
8	8,6,4,5	137 S	Desert Queen Allotment	123,161	3,355
8	8,6,4,5	129 S	Rodeo Creek Allotment	193,402	5,542
9	4	112 S	Humboldt House Allotment	23,837	728
9	4	115 S	Prince Royal Allotment	10,425	97
9	4	106 S	Rye Patch Allotment	40,123	1,981
9	4	104 S	Coal Canyon-Poker Allotment	97,265	3,144
10	10	124 S	Klondike Allotment	50,321	4,610
10	10	119 S	Rawhide Allotment	122,631	2,740
10	10	118 S	Star Park Allotment	84,091	3,294
11	4	109 S	Clear Creek Allotment	55,455	1,304
11	4	105 S	Goldbanks Allotment	37,460	2,112
11	4	121 S	Dolly Hayden Allotment	77,904	864
12	10	117 S	South Rochester Allotment	175,457	3,964
13	10	142 S	South Buffalo Allotment	234,335	122
13	10	114 S	Pleasant Valley Allotment	174,543	10,553
13	10	148 S	Jersey Valley Allotment	66,517	917
DV	10	3030 S	Hole in the Wall	84,204	1,224
DV	10	Carson	Boyer Ranch	74,555	1,790
DV	10	Carson	Copper Kettle	127,194	2,333

Carson = Carson City Field Office; DV = Dixie Valley; P = Paradise-Denio; S = Sonoma-Gerlach

Most of the grazing areas in the Paradise-Denio area are cattle and horse operations. One exception is the Jakes Creek Allotment, which graze sheep. The Sonoma-Gerlach grazing areas are a mixture of cattle and sheep operations.

The assessment area does not completely encompass the grazing areas. Some grazing areas intersect the assessment area in very small portions of the PVAs or KGRAs. See Figure 3.14-1 for a pictorial description of the grazing areas in relation to the PVAs and KGRAs.

3.14.2 Environmental Impacts

Potential impacts on some of the allotments depend on the location of development in relation to the grazing areas. There is also potential for cumulative impacts in the PVAs, KGRAs and hydrological basins with multiple hot springs or accessible geothermal areas. Impacts to range resources would include any activity that would decrease the AUM number, thus decreases the amount of livestock that could forge within an allotment. The decrease in livestock would coincide with the area(s) of disturbance.

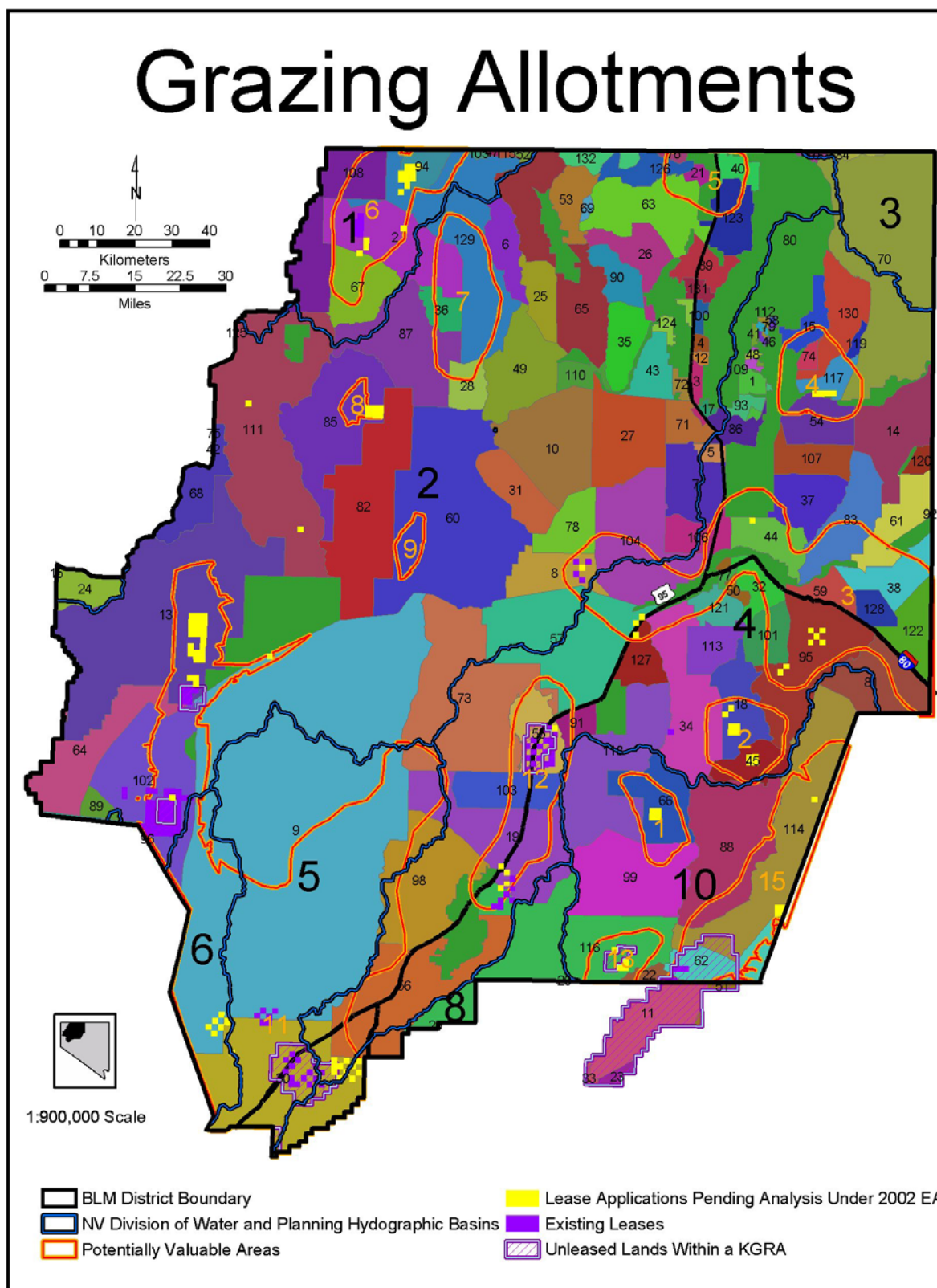
**TABLE 3.14-2
DESIGNATION OF RANGE ALLOTMENTS***

Range No. and Area	Range Allotment Name	Range No. and Area	Range Allotment Name
34 P	Spring Creek Allotment	109 S	Clear Creek Allotment
38 P	Osgood Allotment	116 S	Pumpnickel Allotment
39 P	Iron Point Allotment	124 S	Klondike Allotment
41 P	Golconda Butte Allotment	129 S	Rodeo Creek Allotment
46 P	Pueblo Mountain Allotment	135 S	Blue Wing-Seven Troughs Allotment
47 P	Wilder-Quinn Allotment	137 S	Desert Queen Allotment
51 P	Alder Creek Allotment	142 S	South Buffalo Allotment
68 P	Martin Creek Allotment	1034 P	White Horse Allotment
101 S	Rock Creek Allotment	Carson	Boyer Ranch
105 S	Goldbanks Allotment		

Carson = Carson City Field Office; P = Paradise-Denio; S = Sonoma-Gerlach

* Allotments are either totally encompassed, or have more than half their areas within the assessment area.

FIGURE 3.14-1
GRAZING ALLOTMENTS



3.14.2.1 Proposed Action

Direct Impacts – There are no direct impacts to issuing leases for future geothermal exploration, development, and production activities.

Indirect Impacts – When considering the “reasonably foreseeable development scenario,” the indirect impacts to range resources would be addressed in site-specific EAs tiering off this PEA. As such, environmental and range concerns would be addressed on a more intimate level, taking into consideration equipment placement and roads that would create the least disturbance. Mitigation measures would be addressed in individual EAs as is appropriate to each lease application.

The following are the potential environmental impacts on range resources when analyzing the “reasonably foreseeable development scenario.”

Exploration. The impacts on range resources during the exploration phase would be minimal. Geothermal activities during this phase are short in duration and limited to a very small area.

Development. The impacts on range resources during the development phase would also be minimal; however, more broad and longer in duration. Geothermal activities would have no adverse effects on grazing or other range resource uses.

Production. The impacts on range resources during the production phase would be less than that of the development phase. Even though the production phase would expect to last several decades, the surface area impacted would be extremely small as related to the entire range resource.

Close-Out. The impacts on range resources during the close-out phase would be minimal. These geothermal activities would be short in duration and limited to the already disturbed areas.

3.14.2.2 No Action Alternative

Direct Impacts – There are no direct impacts to issuing leases for future geothermal exploration, development, and production activities.

Indirect Impacts – Indirect impacts from the No Action Alternative would be similar to those described in the Proposed Action; however, updated mitigation measures and stipulations would not apply using the 1982 Geothermal EA.